Resp. Ex. 6.0

ILLINOIS COMMERCE COMMISSION

CASE NO.

DIRECT TESTIMONY

OF

DR. CHANTALE LACASSE

SUBMITTED ON BEHALF OF

CENTRAL ILLINOIS LIGHT COMPANY
CENTRAL ILLINOIS PUBLIC SERVICE COMPANY
ILLINOIS POWER COMPANY

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Chantale LaCasse. My business address is 1166 Avenue of the Americas, New York, NY, 10036.

Q. What is your current position?

A. I am a Vice President with National Economic Research Associates, Inc. ("NERA").

Q. Please summarize the professional qualifications that have led you to take a position at NERA.

A. I hold a B. Soc. Sc. with Honors in Economics (1983) and a B.A. with Honors in Mathematics (1984) from the University of Ottawa (Canada). I hold an M.A. (1986) and a Ph.D. in Economics (1991) from the University of Western Ontario (Canada). During my doctorate, I specialized in Industrial Organization, Public Finance and Game Theory. Game Theory is the technical basis for the theory of auctions. I worked under the supervision of two of the most well-known auction theorists at the time, R. Preston McAfee and John McMillan. R. Preston McAfee is now J. Stanley Johnson Professor of Business, Economics and Management at the California Institute for Technology (Pasadena, CA). John McMillan is now Jonathan B. Lovelace Professor of Economics at Stanford University (Palo Alto, CA).

For my doctoral dissertation, I developed novel game-theoretical models to analyze whether market players can collude in the presence of uncertainty in their economic environment. One of the models that I developed applied this general theme specifically to market players participating in auctions. This work of my doctoral

dissertation formed the basis for one of my professional papers, which was published in one of the leading economic journals, the *RAND Journal of Economics*.

Brock University (St. Catharines, Canada) hired me to a full-time academic position before I had completed my Ph.D. I subsequently held various full-time academic positions at the University of Ottawa (Ottawa, Canada) and the University of Alberta (Edmonton, Canada), as well as visiting positions at the University of Toronto (Canada) and the Universitat Autonoma de Barcelona (Spain). I received tenure in 1996 and I was promoted to the rank of Associate Professor in 1998. I was the primary (at times the only) specialist in Game Theory in the Department where I taught and conducted research. Every year I taught Game Theory and Microeconomic Theory to both undergraduate and doctoral students, and I supported colleagues who did research that incorporated game-theoretical concepts. I conducted original research in both economic theory and economic policy. My research was grounded in game theory and it included work in auctions. I published more than a dozen articles in refereed academic journals, included in the *American Economic Review*, the *RAND Journal of Economics*, *Games and Economic Behavior*, and *The Energy Journal*. I presented results of my research at workshops and conferences, nationally and internationally, including meetings of the *International Association for Energy Economics*, and meetings of the *Econometric Society*. I received the John Vanderkamp Prize for the best article in *Canadian Public Policy/Analyse de politiques* in the year 2000 for an article co-written with two of my colleagues at the University of Ottawa.

On the basis of my expertise in the theory of auctions and in the implementation of auctions, in 1997 I was offered the honor of holding the T.D. MacDonald Chair in

Industrial Economics at the Canadian Competition Bureau. The Canadian Competition Bureau is the equivalent of the antitrust division at the Department of Justice. The T.D. MacDonald is a one-year visiting position that is offered to one outstanding Canadian academic each year. The Competition Bureau at that time needed expert advice before implementing Canada's first auction for spectrum licenses. (A spectrum license grants to its holder the right to use certain frequencies of the electromagnetic spectrum to provide a communication service, such as cell phone service.) The Canadian government was considering whether to follow the lead of the United States' Federal Communications Commission. In 1994, the FCC had started auctioning off spectrum licenses and, on the advice of auction theorists such as Preston McAfee and John McMillan, the FCC had used a novel auction format, called the Simultaneous Multiple Round ("SMR") Auction. The Canadian government wanted advice on using a similar design and wanted advice regarding enhancing any aspects of the design that could discourage collusion. As holder of the T.D. MacDonald Chair, I provided advice regarding the design of Canada's upcoming spectrum auction. I also provided advice on various antitrust matters, including a competitive assessment for a merger and advice in a price-fixing case.

Starting in 1998, I provided consulting advice on auctions and on antitrust matters on a free-lance basis. I provided additional advice to the Canadian government concerning the design of the first spectrum auction. I also provided advice on antitrust matters, including the draft of Canadian Intellectual Property Enforcement Guidelines. I also provided bidding advice to EPCOR Utilities Inc. ("EPCOR"). In the summer of 2000, EPCOR was bidding to buy Power Purchase Agreements in a simultaneous multiple round auction similar to the auction format that had been used for the sale of

spectrum licenses. I provided advice to develop a bidding strategy and then provided round-by-round bidding support.

On the basis of my expertise in the theory and implementation of auctions, I was hired by NERA in 2001 to provide advice mainly to energy clients.

Q. Please summarize your consulting experience since you joined NERA.

A. My consulting experience at NERA has consisted of providing conceptual advice on auction design, of providing detailed practical advice regarding the implementation of auctions, and of managing solicitation processes. I have provided advice on all aspects of auction design, including the type of auction format, the information to be revealed to bidders, and the way in which winning bid prices are determined. I have written detailed rules for auctions and other solicitation processes, based on my expertise in the theory of auctions and on the objectives that the auction or solicitation was meant to achieve. I have provided advice on the implementation of auctions and the management of solicitation processes with a view to maximizing the success of such auctions, including putting in place and designing bidding procedures, preparing training materials for bidders, and using bidder comments to finalize solicitation documents. I have managed various solicitation processes, performing bidder qualification, and managing the bid submission and evaluation process.

More specifically, my main engagements at NERA have been as follows.

For each of the past four years, I have been Auction Manager for the Basic Generation Service auctions in New Jersey on behalf of the four New Jersey Electric Distribution Companies, Atlantic City Electric d/b/a Conectiv Power Delivery, Jersey Central Power & Light, Public Service Electric & Gas, and Rockland Electric. These

auctions have involved the purchase of $5 billion of electric supply for all default customers of the state of New Jersey. I was part of the team that originally designed all elements of the auction process, including the choice of a clock auction as the auction format and the detailed rules for the auction, the association and confidential information rules to ensure the independence of bidders, the design of a standard contract, the selection of product as vertical tranches of full-requirements service, the rate design to translate auction prices into retail rates, as well as the qualification procedures and the application forms. Every year since the inception of this auction process in 2001, I have provided regulatory support to the Electric Distribution Companies ("EDCs"), helping to prepare filings for the New Jersey Board of Public Utilities ("BPU"), responding to discovery, evaluating proposals from other parties for changes and improvements to the process, preparing comments, and presenting testimony on the benefits of the auction process.

In each of these years, I have managed the New Jersey statewide auction process on behalf of the EDCs and the BPU. I have responded to bidder questions; maintained a web site to provide information to bidders including final solicitation documents, rate design tools and data necessary to prepare bids; prepared and led training sessions for bidders; prepared protocols for the review by the BPU's Auction Advisor that describe how the auction process is run; led the process to qualify bidders; trained personnel and established all systems and infrastructure necessary to run the auction; administered the bidding procedures by which bids are received and processed in accordance with protocols approved by the BPU; and, finally, provided briefings and reports to the BPU concerning the central aspects and results of the auction process.

After each auction, I have advised the EDCs concerning potential improvements to the auction process. I have participated in discussion with BPU Staff and the EDCs regarding these potential improvements. I assisted in developing a filing for the following year that incorporated changes for the next auction.

In 2004, I was retained to serve as Independent Auction Manager for the FirstEnergy Companies' Competitive Bid Process ("CBP") in Ohio. The Public Utility Commission of Ohio ("PUCO") had ordered the FirstEnergy Companies ("FirstEnergy") to hold a clock auction, similar to the format used in New Jersey, as a market test for the Rate Stabilization Plan filed by FirstEnergy. The PUCO had the choice between, on the one hand, accepting the results of an auction to procure full-requirements service for FirstEnergy's Standard Service Offer Load (about 10,000 MW) for the period beginning January 1, 2006 to December 31, 2008 and, on the other hand, rejecting the auction results in which case FirstEnergy's Rate Stabilization Plan Pricing would go into effect. I provided advice regarding the necessary modifications to the auction format, wrote the detailed auction rules, provided advice on credit and contract issues, and designed a bidding procedure tailored to the timeline and the size of the auction. I responded to bidder questions; provided advice on the structure of a web site designed to provide information to bidders including final solicitation documents, rate design tools and data necessary to prepare bids; prepared and led a bidder information session; prepared protocols for the review by the PUCO's Auction Advisor; led the process to qualify bidders; trained personnel and established a bidding procedure adapted to the requirements of the Ohio auction; and provided a complete factual report to the PUCO at the end of the auction.

In 2003, I provided advice to the Commission of Energy Regulation in Ireland in their solicitation for new generation capacity. The objective was to bring at least 300 MW of new capacity into operation to meet, at the earliest date achievable, a capacity need anticipated for 2005. The successful bidder(s) would win the right to enter into an agreement for up to ten years that provided revenue support for their generating facility. I provided advice in designing a solicitation with the objective of selecting the most advantageous group of generating facilities, taking into account their anticipated commercial operation dates, the amount of capacity brought to market, their location, and the overall revenue requirement of each plant. The solicitation was a Request for Proposal ("RFP"). I provided advice on the financial qualifications that bidders had to meet, on the measures that were necessary to foster competition, and on the evaluation of the bids. I provided advice on drafts and on the final version of the solicitation documents. I was part of the evaluation team, playing a major role in the financial evaluation of bidders. Since 2004, I have also been providing similar advice to the Ontario government (Canada) in their on-going solicitations for new conventional and renewable capacity.

In 2003, Jersey Central Power & Light proposed to the BPU a pilot program by which its residential customers could obtain green energy at the Basic Generation Service price. I managed the RFP that was conducted for the procurement of this green energy. I presented JCP&L's proposal at various regulatory meetings. I worked with interveners to examine various alternative proposals for the procurement of Green BGS and to choose the proposal that was most likely to lead to a successful pilot program. I worked with JCP&L and their attorneys to finalize the BGS-Green contract that the winning supplier

or suppliers would sign, on issuing the final solicitation documents, and on answering bidder questions. I managed the bid evaluation process, including the qualification of bidders and the comparison of the bids. I prepared a full factual report for the BPU presenting the results of the solicitation.

NERA has been retained on other occasions where I have been called to provide advice on auction design and implementation, most notably by the Northeast ISOs (PJM, the New England ISO, and the New York ISO) to provide advice on their capacity market; by the Infocomm Development Agency of Singapore to provide design advice for their 2G and 3G spectrum auctions; and by the Balancing Pool of Alberta (Canada) to provide advice on the sale of Power Purchase Agreements that had gone unsold in the 2000 auction. I have provided expert testimony on the use of sealed bid auctions (*i.e.*, RFPs) for the sale of generation assets, and on the benefits of clock auctions for the procurement of supply for BGS customers.

Q. What is the purpose of your testimony?

A. As set forth in testimony sponsored by Ameren witnesses Mr. Craig Nelson, Ameren is petitioning the Illinois Commerce Commission ("ICC") to approve an auction process for the purpose of procuring supply for the load of its BGS customers. Ameren's decision to recommend this procurement method results from, *inter alia*, its review of the New Jersey BGS auction process and results and its participation in the Post 2006 procurement workshops associated with the ICC's Post 2006 initiative. Counsel for Ameren requested that my testimony:

1. Explain the advantages of an auction process in determining market value and pricing wholesale procurement and compare an auction process to an RFP process;

2. Describe the key elements of the New Jersey BGS auction process and how that process is implemented;

3. Review the competitive safeguards in the New Jersey BGS Auctions and those included in Ameren's auction proposal;

4. Provide my understanding of the details of the Ameren proposal;

5. Elaborate on the details of how, using the clock auction format included in the Ameren proposal, the bids are processed and the final auction prices are determined;

6. Offer my opinion on whether the Ameren Illinois BGS auction proposal meets its objectives and includes the elements necessary for a successful procurement process and evaluate whether, if Ameren and Commonwealth Edison seek to implement different contract term structures, this would be likely to have a negative impact on the auctions.

My testimony is structured to address each of these topics in turn.

Q. Have you advised Ameren in developing the Competitive Procurement Auction Rules included in this filing?

A. Yes, I have.

II. OPEN AUCTIONS CAN LEAD TO SUBSTANTIAL ECONOMIC BENEFITS

Q. In describing how you had come to be named T.D. MacDonald Chair, you mentioned that the Federal Communications Commission ("FCC") started to use auctions in 1994 to assign spectrum licenses. What was the main method used by the FCC prior to 1994?

A. Prior to Congress voting to allow the FCC to use auctions to allocate spectrum licenses, the FCC mainly assigned licenses through a "beauty contest." Telecommunications companies that wanted to be considered for a spectrum license would file an application, typically presenting their experience, their qualifications, and their business plan for the development of the license. The FCC would hold hearings to compare the proposals and choose the winners based on the quality of their proposals.

213 **Q. In your view, what prompted the change to using auctions to assign spectrum**
214 **(rather than using administrative hearings)?**
215 A. In my view, the main reason was to encourage an efficient allocation of resources and an
216 efficient use of the spectrum.
217 A decision made on the basis of comparative hearing is based on each company's
218 own description of its business plan. Allocating spectrum based solely on the companies'
219 description of their business plan means that spectrum allocation likely would be based
220 more on appearances than on substance. The decision process might not lead to an
221 efficient allocation of spectrum.
222 In contrast, in an auction, the highest bidder wins. The company willing to make
223 the highest bid is generally the company that expects the highest profit. In a well-
224 designed auction where all bidders participate on an equal footing, the company that can
225 use the spectrum resource most efficiently to provide services to customers is the
226 company that expects the highest profit. Companies that are less efficient have less
227 headroom to bid up the price of the license and still make a return on their investment;
228 companies that are more efficient have more headroom and can bid higher. The auction
229 selects the most efficient provider of services for customers.
230 **Q. Can you please describe the auction format used by the FCC?**
231 A. The auction format selected by the FCC was the Simultaneous Multiple Round Auction
232 (also called the Simultaneous Ascending Auction). This auction format is a
233 "simultaneous" auction because several related items are auctioned and sold at the same
234 time, *i.e.*, simultaneously. For example, the auction format could be used to auction
235 multiple spectrum licenses for providing a given service (*e.g.*, two-way paging) but in

various geographical locations. The auction format has multiple rounds. In a round, bidders submit their bids on the licenses that they wish to acquire. The results are tabulated including, for a given license, the highest bid and the identity of the bidder who made the highest bid. Bidders are provided with information regarding the results of the round, which in some auctions includes the identity of the highest bidder. Bidders then are invited to better their bids in the next round. The auction ends when bidders are no longer willing to better their bids, so that a single highest bidder is left for each license.

Q. Did the FCC seek advice from auction theorists in selecting this format?

A. Yes, the FCC and other interested parties sought the advice of game theorists specializing in auctions. The FCC sought advice from Professor John McMillan. The main telecommunications companies, and other governmental agencies, also sought advice from game theorists specializing in auctions including Professor Preston McAfee, Professor Paul Milgrom (currently at Stanford University) and Professor Robert Wilson (currently also at Stanford).

Q. Why did auction theorists recommend the Simultaneous Multiple Round Auction for the sale of spectrum licenses?

A. The recommendation for a multiple round structure was based on auction theory. In a multiple round structure – also called an "open auction" – bidders learn by getting market information during the auction and bidders can adjust their bids on that basis. The additional information that bidders get during the auction reduces the uncertainty that bidders face regarding the value of the licenses and regarding the competition that they are facing. This reduction in uncertainty – compared to an auction with a single round or

with a simple two-stage structure – leads to more aggressive bidding. The prices in the auction then better reflect the bidders' assessment of market value.

The recommendation to use a simultaneous auction – an auction in which all available licenses to provide a given service are sold at once – was also supported by economic theory. In such a structure, bidders can pursue a specific business plan that would require the aggregation of particular licenses. For instance, if a bidder has plans that require licenses in contiguous geographical locations, the bidder in a simultaneous auction can bid for all those licenses at once, and if in the course of the auction one or more of these licenses becomes too costly from that bidder's perspective, the bidder can go to a backup plan and modify the licenses that the bidder wants to pursue. Similarly, if a bidder wants to establish itself in a given geographical location and several basically identical licenses are available for that same geographical location, and these licenses are all on offer simultaneously, the bidder can select the license that is most affordable in any given round. The multiple round structure and the simultaneous sale of licenses together allow bidders to arbitrage away any unwarranted price differences among similar licenses, ensuring that all similar licenses are valued in accordance with the market.

Q. Does the Simultaneous Multiple Round Auction have other advantages in your opinion?

A. Yes, it does. Completely unlike the administrative process that used to determine spectrum allocation, the Simultaneous Multiple Round Auction has very well defined rules. The highest bid wins. (It is the highest bid given that this is an auction in which bidders are buying – if it were an auction in which bidders are supplying, like the auction proposed to procure supply for Ameren's customers, the lowest bid would win.) Bidders

know exactly what they have to do to win, and given the bids submitted by bidders over the course of the rounds, only one factor is used to determine the winners. This feature of the Simultaneous Multiple Round Auction is often referred to as "transparency." Although there are many different definitions of transparency in many contexts, in an auction context, a process is transparent if bidders understand and can observe the process by which winners are chosen, and if bidders understand and can observe the process by which the final sale price is determined.

When the auction format is transparent, it is likely that bidders will perceive the auction format to be fair. No one bidder is advantaged in the auction process by virtue of who the bidder is. To the extent that well established players in the market, or larger players, or affiliates of the utilities are not favored, this feature encourages smaller or newer players to participate.

Q. You mentioned that Canada was considering using the same Simultaneous Multiple Round Auction format for its assignment of spectrum licenses. Did Canada and other countries adopt this auction format for the assignment of spectrum licenses?

A. Yes. For those licenses that Canada has assigned by auction, Canada has used a Simultaneous Multiple Round Auction format. However, in Canada spectrum licenses are not necessarily assigned through auctions; some are, while others are assigned through administrative decision, and still others are awarded on a first-come first-served basis. It depends on the services to be provided.

Other countries have adopted this auction format as well. Other than the U.S. and Canada, I am aware of 21 other countries where Simultaneous Multiple Round Auctions have been used for the sale of spectrum. (*See* Resp. Ex. 6.1 attached to this testimony).

Q. Would you say that Simultaneous Multiple Round Auctions are now the norm for the sale of spectrum?

A. Yes, I would. With the U.S. having held 53 auctions since 1994 using this format (*see* Resp. Ex. 6.2 attached to this testimony), and with over 20 countries also having used this format, the Simultaneous Multiple Round Auction format has now very much become accepted.

Q. Was the auction format used in each of these instances exactly as it had been first designed for the FCC?

A. No. As one would expect, practitioners and auction theorists have responded to results of previous auctions to refine and improve the auction format, as well to tailor the auction formats to deal with specific circumstances and objectives.

There have been several innovations. One series of innovations concentrated on simplifying the bidding for bidders and on reducing any ability that bidders would have to signal their intentions to each other through the amounts of their price bids. The initial innovation was to introduce "non-discretionary bid increments." In this variant of the Simultaneous Multiple Round Auction, instead of having bidders decide the price amount of their bid prices on each license, the Auction Manager suggests a fixed number of prices (typically, 9 different prices) for each license in a round. The bidder chooses from this menu the price at which it is ready to acquire the license, if any. The FCC uses this variant almost exclusively now.

A second innovation was to limit the number of suggested prices to one. Bidders then just decide whether or not they are willing to accept the price suggested by the

Auction Manager. This variant is called "click-box" bidding. It has been used in two Canadian auctions for spectrum licenses (the 24-38 Ghz auction and the 2 Ghz auction).

Another innovation that goes in this same direction is a clock auction for the auction of items that are all similar. In a clock auction, the Auction Manager suggests a price, and bidders state the quantity that they want at that price. The bidding is then substantially the same as it is with click-box bidding in a Simultaneous Multiple Round Auction. In click-box bidding the bidder states whether it accepts a price for each unit; in a clock auction the bidder states how many units it wants at that price. The result is the same.

Q. Do these variants of the Simultaneous Multiple Round Auction – the click-box bidding variant and the clock auction – share the advantages of the Simultaneous Multiple Round Auction that you were discussing earlier?

A. Yes they do. All these auction formats are open auctions. They feature multiple rounds so that bidders learn and can re-adjust their bids as the auction proceeds. All these auction formats are simultaneous so that bidders can switch and arbitrage price differences. All these auction formats are transparent – in the sense that the rules to determine the final price and winners are clear – so that fairness and participation are promoted.

Q. Have open auctions – either as Simultaneous Multiple Round Auctions or as Clock Auctions – been used in the energy sector?

A. Yes, they have. Since 2000, over twenty open auctions have been conducted in the energy sector around the world.

Q. Can you provide examples of when and where open auctions have been used in the energy sector?

A. In the United States, the Electric Distribution Companies in New Jersey have held open auctions to procure full-requirements supply for their basic generation customers. These auctions were held annually in 2002, 2003, 2004, and 2005. The FirstEnergy Companies have held one open auction to test their rate stabilization plan. I discuss the New Jersey and First Energy auctions in other portions of my testimony. More than twelve open auctions have been run in Texas since 2001 to sell capacity entitlements from the plants of Power Generation Companies ("PGCs") affiliated with the utilities.

Around the world, Électricité de France ("EdF") uses open auctions to sell power purchase arrangements and virtual power plants. EdF started using this auction method in the Fall of 2001. It holds four auctions every year and has held approximately fourteen auctions to date. The Department of Resource Development in Alberta (Canada) has held an open auction to sell Power Purchase Arrangements in the summer of 2000.

Q. In the context of BGS procurement for the Illinois utilities, do you believe that the open auction as proposed by Ameren has significant advantages over using a sealed bid RFP process?

A. Most definitely. As I stated earlier, open auctions are likely to provide important economic benefits in contexts such as BGS procurement for the Illinois utilities and open auctions are likely to have significant advantages over the use of a sealed bid ("RFP") process.

In general in an open auction, bidders are provided with market information round by round, and bidders can revise their bids and re-adjust their bidding strategy on that

basis. This is in contrast to an RFP, where bidders must make all decisions regarding their bids and their strategies before submitting their proposal, and where bids are generally evaluated without bidders having the flexibility to revise their offers in light of new market information.

In the open auction that Ameren is proposing, bidders are provided with market information round by round. Bidders are provided with the relationship between the level of prices and the level of excess supply in the auction. This information is valuable to bidders, as it can be the basis for revising bids and re-aligning bidding strategy as needed. For example, a bidder that had formed expectations before the auction about the final price for a product may well find that this price has been reached while there is still excess supply – perhaps substantial excess supply – left in the auction. The bidder will realize that the rest of the market has assessed future market conditions differently or has been able to assemble the power products required for full-requirements service more cheaply. Receiving market information round-by-round is valuable because all bidders are independently assessing similar market risks and opportunities. In this case, the bidder has the ability to re-align its expectations in light of the judgment of the rest of the market or to revise its business plan so as to attempt to cut costs to be able to compete.

The ability of the open auctions to deliver valuable information to bidder, and the flexibility that bidders have to re-adjust their bids in the light of new information lead to important economic benefits. Bidders face less uncertainty than in an RFP process in which they would have to bid without the benefit of this valuable information. The flexibility to re-adjust bids takes away some of the guess work in bidding that is present in an RFP. When bidders face less uncertainty and guesswork, bidders have more

confidence and tend to bid more aggressively. Bidders tend to be more willing to supply at lower prices. This aggressive bidding results in prices that are more competitive and better for consumers. This is an important economic benefit of open auctions in this context.

A second important benefit of open auctions in this context is that the auction tends to select the most efficient providers. Because the auction ends when bidders are no longer willing to better their offers, the bidders who do win at the end of the auction are those that are willing to serve the load at the lowest prices. Suppliers who are less able or willing to take on the risks of serving the load at a given price will withdraw from the auction at higher prices. The bidders that remain are most likely the ones that can serve the load at the lowest cost and hence have decided to continue bidding as the prices ticked down. Those who are willing to take on the responsibility of serving the load at the final prices do so with the full knowledge of the market information that has been revealed during the auction with respect to market willingness to serve at the prices prevailing during each round of the auction.

Open auctions also have important additional economic benefits when several related products are at auction. This is the case for Ameren. Ameren will be seeking to procure supply for several groups of its default customers in the context of the BGS procurement process: (a) Residential and Small Business ("R&SB") customers (under 1 MW); (b) Large Commercial and Industrial ("LC&I") customers (1 MW or above) affirmatively electing a fixed price service: and (c) customers on a real-time pricing service, consisting of LC&I customers that have not elected a fixed price service. In the first year, Ameren will be seeking to procure supply for its R&SB customers in a mix of

one-year, two-year, and three-year supply periods so as to step into a three-year rolling procurement structure. Supplies for the other customer groups would be on a one-year basis. The load for a given customer group and for a given supply period is a separate product in the auction, meaning that a supplier could bid to serve – for example – a portion of Ameren's R&SB customers load for a three-year period, without also being required to bid to serve a portion of the load of any other of Ameren's customers, or a portion of the load of Ameren's R&SB customers for another term.

The products in the Ameren auction are clearly related. Some of the wholesale power products that bidders will assemble to provide the full-requirements service are the same across all items. Some bidders will view one item at the auction as a substitute for another, meaning that they are willing to bid on one item or the other, depending on the difference in the prices. For example, a bidder may prefer to bid on the load of R&SB customers, but if the difference in the price between the load of R&SB customers on the one hand, and the load of LC&I customers on the other is sufficiently large, the bidder would want to switch and bid on the load of LC&I customers instead. Other bidders, given their business plans, may view one item as complementary to one or several others. For example, a supplier may prefer to bid to win on both the hourly product and the product to serve LC&I customers at a fixed price so as to serve these customers regardless of the class of service they elect.

When several related products are included in the same auction, one economic benefit of the use of open auctions is that the prices that are set will be reflective of the market. In an open auction, bidders see the prices as they tick down every round. Bidders can, in response to those prices, switch their bids from one product to another. The

switching means that the auction sets price differentials that are rational and market-driven. If a gap in prices opens up, and this gap is not supported by the market's assessment of a difference in the cost of serving the products or a difference in risk, the auction format naturally works to close the price gap to a market-sustainable level.

This is how the gap would close. If a gap opens up and a product is "over-priced' relative to others in a round, bidders would typically respond by switching their bids toward that higher-priced product and out of other products. The supply of the higher-priced product will rise and the supply of the other products will fall. As a consequence, when prices are calculated for the next round, the price of the higher-priced product will tick down while the price of the lower-priced products will hold steady or will tick down by a relatively smaller amount. As a result, a price gap that is not consistent with the market will narrow. Such a price gap will close over the course of the auction to a level that can be sustained by the market and that results from a rational assessment of differences in cost. The resulting prices will be reflective of the market.

A final economic benefit of the open auction when there are several related products is that the allocation of supply responsibility over the various products proposed by Ameren to serve the load of BGS customers is likely to be efficient. Because the auction allows bidders to switch from one product to another in response to the prices they see, the auction promotes the best match of product to supplier. A bidder will bid on a product because it presents the best market opportunity given the bidder's business plan and ability to manage risk.

Q. Do you believe that the Ameren proposal for an open auction is superior to the use of a RFP process for acquiring supply for BGS load?

A. Yes. An RFP process would not have the advantages of an open auction that I have just explained. A sealed bid process presents bidders with more uncertainty, as it does not provide information to bidders on the basis of which they can revise their bids. A sealed bid process forces bidders to guess in preparing their bids as it does not typically provide bidders flexibility to adjust their bidding strategy and revise their business plan. A sealed bid process is not well suited to obtaining prices that are reflective of market when multiple products are involved. A sealed bid process does not promote the best match of product to supplier or the selection of efficient providers.

Q. You have talked about the advantages of open auctions in the context of acquiring BGS supply. Are these advantages always present, so that open auctions are in all contexts preferable to RFP processes?

A. No, I do not believe that open auctions are always better. No single auction design is best in all circumstances. The auction design chosen should be tailored to the circumstances and to the objectives of the situation.

I have explained some of the circumstances where using an open auction – such as the one proposed by Ameren – would yield important economic benefits. Similarly, there are other circumstances to which RFPs are better suited. Such circumstances include instances where the characteristics of the product at auction are difficult to define in advance. For example, in the sale of a generating plant, there can be substantial asset-specific uncertainties about physical condition, asset life, personnel costs, or expansion possibilities. As another example, in the procurement of new capacity, there can be

various business plans and various types of plants that must be compared on various dimensions other than price. An RFP allows bidders to submit proposals that address these uncertainties or these additional dimensions. These are circumstances in which an open auction would not offer the same economic benefits and in which another type of competitive process such as an RFP may be more likely to deliver the best outcome.

Q. Are RFPs still commonly used in the energy sector?

A. Yes, I believe that RFPs do remain a commonly used auction format in the energy sector. RFPs typically are used for the sale of generating assets and for the procurement of new capacity. RFPs also sometimes are used for the procurement of supply for default customers (as in Maryland and the District of Columbia as well as in several New England states).

Q. Are there circumstances in which you personally have recommended or testified to the advantages of an RFP process over an open auction process?

A. Yes, I have. I have testified on behalf of Texas New-Mexico Power Company that the choice of an RFP process for the sale of a generating asset was appropriate and that the use of an open auction would not have been beneficial. I have advised Jersey Central Power & Light in New Jersey to use an RFP process to procure supply for their BGS-Green pilot program. I have advised the Commission for Energy Regulation in Ireland and the Government of Ontario (Canada) on the use of an RFP in their solicitation for new capacity.

III. KEY ELEMENTS OF THE NEW JERSEY BGS AUCTION PROCESS

III.A. Legislative and Regulatory Background Leading to New Jersey Auction Process

Q. Please describe the legislative and regulatory background leading to the decision to conduct a competitive auction to procure Basic Generation Service in New Jersey.

A. Certainly. In January 1999, the New Jersey legislature passed the Electric Discount and Energy Competition Act ("EDECA" or "the Act"), which was signed into law on February 9, 1999. EDECA provided that all New Jersey retail electric customers could select their electric supplier starting on August 1, 1999. EDECA also established Basic Generation Service ("BGS") as a regulated service designed to provide electricity to customers who, for whatever reason, did not arrange to purchase electric supply from a competitive entity. (In New Jersey, competitive entities offering unregulated retail generation service are referred to as Third Party Suppliers or TPSs.) EDECA established a transition period lasting four years and starting on August 1, 1999. During the transition period, BGS rates were frozen. EDECA provided that, after the transition, BGS rates were to be market-priced.

For the first three years of the transition, each Electric Distribution Company ("EDC") was required to continue to provide BGS to its customers. The EDCs all settled on restructuring plans that involved divesting generation through asset sales to an unrelated entity or through transfers to an unregulated affiliate. The retail rates for BGS were fixed for all four years to realize the electric discounts specified in EDECA. The four EDCs used a variety of means to supply BGS customers during the first three years, ranging from a full-requirements contract with an affiliate that owned transferred generation capacity, to a variety of market purchases of energy, capacity and other hedging instruments. The EDCs that relied on market purchases built up substantial deferred accounts that represented the excess of power acquisition costs over revenues

from the fixed BGS rates. The EDCs were entitled to recovery of these deferred amounts under the terms of the relevant settlements.

EDECA specified that no later than three years after the starting date of retail competition, the BPU was to issue a decision as to whether to make available to electric suppliers the opportunity to provide Basic Generation Service on a competitive basis. EDECA and the settlements reached by the EDCs in their restructuring cases contemplated that a competitive bid process would potentially be used to select BGS suppliers.

On June 6, 2001, the BPU directed the four EDCs to file specific proposals to implement a competitive procurement process for basic generation service to be provided during the fourth year of the transition period established by the Act. The fourth year of the transition was from August 1, 2002 to July 31, 2003.

On June 29, 2001, the four EDCs filed a joint proposal to use a single statewide auction process to procure supply for the BGS load of all four EDCs. That proposal was the subject of substantial discovery and other parties were invited to comment on the EDCs' proposal and submit alternative proposals. After conducting a hearing and reviewing comments from all interested parties, the BPU in December of 2001 approved the single statewide auction process for BGS to be held in February of 2002. As retail BGS rates were fixed for the fourth year of the transition period, there was a need to establish the market price for BGS for that year in isolation so that any difference between that year's costs and fixed rates could be deferred for later reconciliation. The supply period was only one year.

In June or July of each succeeding year, the EDCs have filed a proposal to procure supply for their BGS customers in compliance with the BPU's directives. Each year, the EDCs have proposed a statewide auction process to simultaneously procure supply for all BGS load in the state. Each year, the BPU has requested alternate proposals from other parties, or suggestions on improvements to the past year's process. Discovery has been served every year, and every year the BPU solicits comments from all interested parties, and the BPU holds a hearing process. Considering the entire record in the proceeding, the BPU then has made a decision in November or December of each year. The BPU has authorized each year a statewide auction to be held in February.

Q. After the first year, how has the auction process changed?

A. One major difference in the auction process that has occurred since 2002 is that starting in February 2003, there have been two auctions instead of one.

One auction is to procure supply for all but the larger commercial and industrial customers. The supply period for this auction (the BGS-FP auction, "FP" for fixed-price) is three years. The procurement is made on a rolling basis so that one-third of the state's BGS-FP load is up for auction each year.

The other auction, (the BGS-CIEP auction, CIEP for Commercial and Industrial Pricing) is to procure supply for the larger commercial and industrial customers. CIEP service is a real time energy price service. The supply period for this auction is one year.

Another major difference with the first auction is that starting with the second auction, the results of the BGS auctions are the basis for establishing retail BGS rates. This is because the retail rates were frozen in the first year. But, as discussed above, the

572 difference between the frozen rates and the BGS acquisition cost was to be deferred for
573 later recovery or refund.

574 **III.B. The Goals of the New Jersey BGS Auctions**

575 **Q. What is your understanding of the goals of the statewide auction process in New**
576 **Jersey?**

577 A. Based on my involvement in the design and implementation of the BGS auction process,
578 I believe that the EDCs had the following goals for the auction proposal that they offered:

579 1) **To obtain reliable supply on behalf of BGS customers at prices consistent**
580 **with market conditions.** EDECA specified that the prices charged for the
581 regulated BGS service should reflect the market. The EDCs were interested in
582 implementing an auction process that resulted in prices reflective of market
583 conditions.

584 2) **To encourage maximum participation by establishing a fair and transparent**
585 **competitive process.** The process should be transparent in terms of the
586 requirements for participation, the supply contract, the retail rates that will result
587 from the auction, and the manner in which final auction prices are determined and
588 the manner in which winners emerge at the auction. The process should be fair in
589 terms of providing timely and equal access to information for all bidders.

590 3) **To efficiently allocate supply responsibility over the multiple products in the**
591 **auction.** An efficient allocation of supply helps to ensure that prices are best
592 reflective of market and that any market perceptions regarding differences in
593 serving various products are reflected in the prices.

4) **To have competitive entities take, manage, and price BGS risks.** BGS is essentially a price-risk management service where competitive entities assemble supply components in the competitive wholesale market, assess risks, price these risks, and offer a fixed price to customers. Regulation is not needed for a service (portfolio and price-risk management) where there is vigorous competitive discipline, and having competitive entities manage BGS risks ensures that customers obtain the full benefits of this competition for the price-risk management function.

5) **To implement a process for BGS pricing that encouraged the development of and efficient working of retail energy markets.** This means pricing BGS at market rates in order to encourage the development of efficient retail competition. BGS rates should reflect class, seasonal and time-of-day market differences in order to encourage efficient consumption and conservation decisions, and in order to minimize non-productive customer switching in response to rate design inefficiencies.

6) **To design a flexible process.** A flexible process is one that can accommodate future refinements without radical overhaul.

7) **To minimize customer confusion.** The procurement of BGS should, to the extent possible, present customers who stay on EDC service with the same type of retail rate and billing that they had experienced previously.

8) **To preserve the financial integrity of the EDCs.** BGS costs and revenues can exceed 50% of total EDC cost and revenue. BGS costs are an order of magnitude greater than EDC earnings. The EDCs earn no profit from BGS and could not

afford to take risk. It was imperative that the BGS process protect the financial integrity of the EDCs.

Q. Why are the goals of the New Jersey process relevant to this proceeding?

A. The New Jersey process is an example of an auction process to procure supply for default customers that is working well and is considered a success by the regulator, by the distribution companies and by bidders. It is necessary to examine and understand the goals of the process to understand how the process was designed and how all elements of the process work together. All features of the proposal were designed to work in concert with each other and to support the goals of the process.

III.C. The Key Elements of an Auction Process

Q. Is it correct that one of the items that you were asked to prepare testimony on was a description of the key elements of the New Jersey BGS auction process?

A. Yes.

Q. What in your opinion are the key elements of the New Jersey BGS auction process?

A. I believe that there are eight key elements to any auction process that will be used to procure electric service that will be supplied to retail electric customers. These elements are summarized below.

1) **Product design**. The product design fully describes what is being procured at the auction. It includes a description of the obligations of the supplier upon winning, the allocation of risks to the supplier, the term of supply, the customers and load classes to be supplied, *etc.* Ultimately, product design should be fully described in the supplier contract.